Before the
FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of	)	
	)	
International Comparison and Survey Requirements	)	GN Docket No. 09-47
In the Broadband Data Improvement Act	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Inquiry Concerning the Deployment of Advanced	)	GN Docket No. 09-137
Telecommunications Capability to All Americans	)	
In a Reasonable and Timely Fashion, and	)	
Possible Steps to Accelerate Such Deployment	)	
Pursuant to Section 706 of the Telecommunications	)	
Act of 1996, as Amended by the Broadband Data	)	
Improvement Act	)	

REPLY COMMENTS OF THE INSTRUCTIONAL TECHNOLOGY COUNCIL

NBP Public Notice # 30

The Instructional Technology Council (ITC)[1] is pleased to provide comments on this Public Notice to emphasize the critical importance of providing high-capacity broadband capabilities to community colleges and universities. Higher education institutions need bandwidth that is far greater than the bandwidth needed by individual households; they need high-speed, high-capacity broadband capabilities to provide robust, quality, instructional programming, in an online environment, to their students who might be located in rural areas, working adults, caregivers, disabled, returning veterans, or simply students who want to earn their educational credentials to expand their job skills, educational and career opportunities. Most of these student audiences are otherwise out-of-luck, i.e. without these online opportunities these underserved populations would not be able to attend college or university or take the courses they need.

[1] An affiliated council of the American Association of Community Colleges, since 1977 the Instructional Technology Council (ITC) has provided exceptional leadership and professional development to its network of eLearning experts by advocating, collaborating, researching, and sharing exemplary, innovative practices and potential in learning technologies.

Student Demand for Online Courses is Higher than Available Courseware.

In the 2006-07 academic year, the Department of Education reported that 12,153,000 students enrolled in accredited, college-level, credit-granting distance education courses.[2] In Fall 2009, the Sloan foundation reported there was an 17 percent growth rate for online learning, far exceeding the 1.2 percent growth in overall higher education.[3] In Fall 2008, 70 percent of ITC members stated that student demand exceeds the online class offerings at their college.[4] This figure has remained constant during the past four years ITC has surveyed its members.

ITC expects the results from its 2009 survey will be startling due to the economic recession -- many students are returning to college to upgrade their employability skills because they were laid off or fear termination. Others turn to community colleges because they cannot afford to attend four-year universities. ITC members complain that their distance learning enrollments have increased 20 to 30 percent this past year. Ordinarily this would be good news, but reductions in state funding have resulted in layoffs and hiring freezes that have reduced the number of administrative staff and faculty available to serve these new online students. For example, Miami Dade College reported their number of students in their virtual college increased 30 percent this past year.

Reasons Students Need Online Learning Opportunities.

Students need to take regionally-accredited[5] online courses for many reasons and the demand for these educational opportunities increases exponentially every year. These students cannot take traditional classroom-based courses at their local community college or university -- for reasons of necessity and convenience. These students are, for example:

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[2] Distance Education at Degree-Granting Postsecondary Institutions: 2006-07. http://nces.ed.gov/pubSearch/pubsinfo.asp?pubid=2009044

[3] Learning on Demand: Online Education in the United States, 2009. http://www.sloanconsortium.org/publications/survey/pdf/learningondemand.pdf

[4] 2008 Distance Education Survey Results: Tracking the Impact of eLearning at Community Colleges, Instructional Technology Council. http://www.itcnetwork.org/file.php?file=%2F1%2FITCAnnualSurvey2008Results.pdf

[5] Recognized by the U.S. Department of Education, regional accrediting bodies review these online courses and programs to ensure the education provided meets acceptable levels of quality. The accrediting agencies develop strict evaluation criteria and regularly conduct peer evaluations to assess whether or not these criteria are met. See http://ope.ed.gov/accreditation/

-- Working adults who need to upgrade their skills, but are on the job site during traditional class times;
-- Single mothers and other caregivers, who want to return to the workforce, but must learn from home because they cannot afford childcare or someone to watch their sick or disabled relative while they attend an on-campus class;
-- Rural and suburban Americans who do not have the time or cannot travel two or three hours to and from the college campus;
-- Students who want to take a course or degree program not offered by their local higher education institution;
-- Students who find the course they need to graduate is offered at a time that conflicts with their other coursework or work schedule;
-- Returning military personnel who began their coursework online -- learning at a distance from community colleges located in the United States while they were at their military posts overseas -- and want to complete their degree programs from the same institution -- so they can assume a new civilian role;
-- Disabled veterans and others who have no option, but to earn their degrees online, so they can live as productive and self-sufficient members of American society.

Students Need Adequate Broadband Access Speeds to Take Advantage of the Incredible, Complex Video Materials Available.

As increasingly more colleges offer online courses, the need for high-quality video material is needed that requires more bandwidth to accommodate new interactive engaging media (offered in a one- or two-way interactive format) -- especially for any courses that have anything to do with the sciences where special techniques, visual recognition and simulations are paramount, such as courses for medical and health professions, manufacturing, biotechnology, agriculture, engineering, environmental sciences, physics, nanotechnology and other specialty areas.

Sharing Limited Resources.

With proper broadband connections, colleges and universities could achieve definite cost savings and leverage their often limited resources. They could share video and other high-volume educational content among their disparate campuses and regional locations. Broadband

connections would also allow them to partner with other colleges and universities in their state, across the country, and around the globe. Expanding access to educational materials and programs would reduce inefficiencies and redundancies within and among colleges.

Reduce Government Waste.

Expanding broadband connections would expand access to government-funded projects and educational materials -- reducing waste and, thus, increase the scope and reach of tax-payer dollars. For example, with the proper broadband connections, community colleges, which educate more than 60 percent of licensed practical nurses, could benefit from Pulse!! The Virtual Clinical Learning Lab, a cutting-edge simulation project funded by the Department of Defense at Texas A&M University-Corpus Christi which employs virtual-world computer technologies to present case-based medical-education curricula. The Institute of Medicine reports that preventable medical errors account for between 44,000 and 98,000 deaths each year. Virtual reality accelerates development of clinical skills, saves lives and reduces risk to actual patients through practice, rehearsal and controlled risk-taking in virtual space.

Leverage Research and Data Sharing.

In 2007, the Western Interstate Commission for Higher Education reported that "explosive growth in the resolution of sensors and scientific instruments has led to unprecedented volumes of environmental and experimental data, which can be combined, compared, and correlated across time, place, and types of data. Computational science aids in modeling, simulation, and scenario assessment using data from diverse sources. Complex multidisciplinary problems -- from health care and public policy to national security, scientific discovery, and economic competitiveness, complement the historical focus on single disciplines. And important multidisciplinary discoveries are now made by teams of experts spread across the country and around the world.

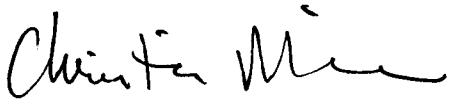
Advanced cyberinfrastructure, enabled by high-speed research and education networks, is essential for participating in all these efforts. With today's advanced information networks, those without access and the ability to participate will be left behind 21st century innovation."[6]

Conclusion.

It is extremely important that policy-makers adopt policies that encourage the deployment of high-speed, high-capacity broadband capabilities for higher education. These policies should focus on building "future-proof" high-speed, high-capacity broadband to these institutions, meaning networks that can provide a minimum of 100 Mbps to small entities and 1 Gbps service or faster to larger entities. This will enable community colleges and universities to offer the robust, regionally-accredited, essential educational opportunities students increasingly demand and need in the years ahead.

When developing a national broadband policy and a definition of broadband in particular, the Federal Communications Commission should ensure that the needs of community colleges and universities for high-speed, high-capacity broadband are met. These needs are different from the needs of residential consumers and should be taken into account in any definition of broadband in the national broadband plan.

Sincerely,



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January 27, 2010

[6] Can You Hear Us Now? Connecting Minority-Serving Institutions in the West to U.S. Advanced Cyberinfrastructure. http://www.wcet.info/2.0/index.php?q=node/361